



STIC Search Report

EIC 3700

STIC Database Tracking Number: 148219

**TO: Linda Sholl
Location: RND 8a31
Art Unit: 3700
Monday, March 21, 2005**

Case Serial Number: 10/675907

**From: Terry Solomon
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RND 8b31
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Search Notes

No current or past litigation found involving US pat. 6213731.

Sources:

Lexis/Nexis
Questel-Orbit

401343 (09) 6213731 April 10, 2001

Time of Request: March 18, 2005 01:12 PM EST

Research Information:

Utility, Design and Plant Patents
patno=6213731

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

6213731

April 10, 2001

Compressor pulse width modulation

REISSUE: September 29, 2003 - Reissue Application filed Ex. Gp.: 3742; Re. S.N. 10/675,907 (O.G. December 16, 2003)

CERT-CORRECTION: April 2, 2002 - a Certificate of Correction was issued for this patent (O.G. April 23, 2002)

APPL-NO: 401343 (09)

FILED-DATE: September 21, 1999

GRANTED-DATE: April 10, 2001

ASSIGNEE-AT-ISSUE: Copeland Corporation, Sidney, Ohio, 02

ASSIGNEE-AFTER-ISSUE: December 10, 1999 - ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS)., COPELAND CORPORATION 1675 W. CAMPBELL ROAD SIDNEY OHIO 45365,
Reel and Frame Number: 10428/0827

LEGAL-REP: Harness, Dickey & Pierce, P. L.C.

Selected file: PLUSPAT
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Comprehensive Worldwide Patents database

**** SS 1: Results 1**
PRT SS 1 MAX 1 LEGALALL

1 / 1 PLUSPAT - ©QUESTEL-ORBIT - image

Patent Number :

US6213731 B1 20010410 [US6213731]

Title :

(B1) Compressor pulse width modulation

Patent Assignee :

(B1) COPELAND CORP (US)

Patent Assignee :

Copeland Corporation, Sidney OH [US]

Inventor(s) :

(B1) HUDDLESTON JEFFREY ANDREW (US); BASS MARK (US); DOEPKER ROY J

(US); FOGT JAMES F (US)

Application Nbr :

US40134399 19990921 [1999US-0401343]

Priority Details :

US40134399 19990921 [1999US-0401343]

Intl Patent Class :

(B1) F04B-049/02 F25B-049/02

EPO ECLA Class :

F04C-027/00C

F04C-029/00B2

F04C-029/10C2B

EPO ICO Class :

R04C-018/02B

R04C-029/10C2B

US Patent Class :

ORIGINAL (O) : 417310000; CROSS-REFERENCE (X) : 062228500 417299000
417440000

Document Type :

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Citations :

US4332144; US4745777; US4747756; US4982572; US5059098; US5329788;

US5342186; US5447420; US5611674; US5613841; US5741120; US6047557;

US6120255; US6123517

Publication Stage :

(B1) U.S. Patent (no pre-grant pub.) after Jan. 2, 2001

Abstract :

A scroll compressor includes a capacity modulation system. The capacity modulation system has a piston that is connected to the non-orbiting scroll that disengages the non-orbiting scroll from the orbiting scroll when a pressure chamber is placed in communication with the suction chamber of the compressor. The non-orbiting scroll member moves into engagement with the orbiting scroll when the chamber is placed in communication with the discharge chamber. The engagement between the two scrolls is broken when the pressure chamber is placed in communication with fluid from the suction chamber. A solenoid valve controls the communication between the pressure chamber and the suction chamber. By operating the valve in a pulsed width modulated mode, the capacity of the compressor can be infinitely varied between zero and one hundred percent.

Update Code :

2001-14

1 / 1 LGST - ©EPO

Patent Number :

US6213731 B1 20010410 [US6213731]

Application Number :

US40134399 19990921 [1999US-0401343]

Action Taken :

19991210 US/AS-A

ASSIGNMENT

OWNER: COPELAND CORPORATION 1675 W. CAMPBELL ROAD SIDNEY; EFFECTIVE

DATE: 19990921

ASSIGNMENT OF ASSIGNORS INTEREST;ASSIGNORS:DOEPKER, ROY J.;BASS,

MARK;FOGT, JAMES F.;AND OTHERS;REEL/FRAME:010428/0827

20020402 US/CC-A

CERTIFICATE OF CORRECTION

20031216 US/RF-A

REISSUE APPLICATION FILED

EFFECTIVE DATE: 20030929

Update Code :

2004-25

1 / 1 CRXX - @CLAIMS/RRX

Patent Number :

6,213,731 A 20010410 [US6213731]

Patent Assignee :

Copeland Corp

Actions :

20030929 REISSUE REQUESTED

ISSUE DATE OF O.G.: 20031216

REISSUE REQUEST NUMBER: 10/675907

EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 3742

Reissue Patent Number:

Session finished: 18 MAR 2005 Time 20:19:37

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